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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Mark T. Cranna

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EXAMINER

DEXTER, CLARK F

ART UNIT

PAPER NUMBER

3724

MAIL DATE

DELIVERY MODE

09/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/695,951	Applicant(s) CRANNA ET AL.	
	Examiner Clark F. Dexter	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-14 and 21-50 is/are pending in the application.
- 4a) Of the above claim(s) 41-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-14, 21-40 and 48-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on May 18, 2009 has been entered. The indicated allowability of claims 1-5,7-14, 21-40 and 48-50 is withdrawn based on the U.S. Patent to Nakahara, pn 6,834,573 in view of the newly discovered family of related/equivalent references including Japanese references 2000-343325, 2001-9634 and 2001-62629; German Publication 100 30 168 and British Publication 2 354 480 (hereafter referred to as the Nakahara family of references). It is noted that although these references are not prior art, they are equivalent/related disclosures of the Nakahara patent and upon careful consideration, appear to shed some light on portions of the Nakahara patent, particularly the structure shown in Fig. 6. The Examiner sincerely regrets any inconvenience caused by this Office action. Applicant is welcome to contact the Examiner to discuss any matters regarding this application. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

Art Unit: 3724

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 5 12, 27-30, 34-37 and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakahara, pn 6,834,573 with reference to related/equivalent disclosures of the Nakahara family of references.

Nakahara discloses a saw blade with every structural limitation of the claimed invention as described in detail in the Office action mailed January 23, 2008 and further including reliance on Fig. 6 which discloses a shelf of the claim language referring to the shelf including a surface 21 that meets the orientation and configuration of the corresponding shelf surface as set forth in the claims. It is noted that the surface 21 of Fig. 6 is considered to correspond to the surface 21 of Figs. 1A and 4A-C.

Claim Rejections - 35 USC § 102/103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Art Unit: 3724

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 13 and 14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nakahara, pn 6,834,573 with reference to related/equivalent disclosures of the Nakahara family of references.

Nakahara discloses a saw blade with every structural limitation of the claimed invention including the specific angle/range of angles set forth in claims 13 and 14.

In the alternative, if it is argued that these angles are not explicitly disclosed and thus not taught by Nakahara, to provide these specific angle/range of angles would be the mere discovery of the optimum or workable ranges within the general conditions of the prior art by routine experimentation and therefore obvious to one having ordinary skill in the art.

Claim Rejections - 35 USC § 103

6. Claims 3, 4, 7-9, 10, 11, 21, 22, 25, 26, 31, 38, 49 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakahara, pn 6,834,573 with reference to related/equivalent disclosures of the Nakahara family of references.

Nakahara discloses a saw blade with almost every structural limitation of the claimed invention but lacks the specific ratios and dimensions set forth. However, these ratios and dimensions would be the mere discovery of the optimum or workable ranges

Art Unit: 3724

within the general conditions of the prior art and therefore obvious to one having ordinary skill in the art.

7. Claims 23-26, 32, 33, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakahara, pn 6,834,573 with reference to related/equivalent disclosures of the Nakahara family of references in view of Japanese Publication 6-716 (hereafter JP '716).

Nakahara discloses a saw blade with almost every structural limitation of the claimed invention but lacks, for example:

[claim 23 (from 3); claim 32 (from 31); claim 39 (from 38)] wherein:

the plurality of set teeth each comprise a second shelf;

each second shelf comprises a second shelf surface, and each second shelf defines a dimension (S2) extending between the tip of the respective tooth and the second shelf;

[claim 24 (from 23); claim 33 (from 32); claim 40 (from 39)] wherein $S2 = (B + S1)/2$ and S1 is within the range of between approximately .13 inch and approximately .16 inch.

Regarding claims 23, 32 and 39, such second shelf configurations are old and well known in the art and provide various well known benefits including facilitating the accommodation of various sizes of chips and chips formed from various types of materials. JP '716 discloses such a second shelf (e.g., see Fig. 6). Therefore, it would have been obvious to one having ordinary skill in the art to provide such a second shelf

Art Unit: 3724

on the saw blade of Nakahara for the well known benefits including those described above.

Regarding claims 24-26, 33 and 40, the combination of Nakahara and JP '716 teaches a saw blade with almost every structural limitation of the claimed invention but lacks the specific ratios and dimensions set forth. However, these ratios and dimensions would be the mere discovery of the optimum or workable ranges within the general conditions of the prior art and therefore obvious to one having ordinary skill in the art.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark F. Dexter whose telephone number is (571)272-4505. The examiner can normally be reached on Mondays, Tuesdays, Thursdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571)272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Clark F. Dexter/
Primary Examiner, Art Unit 3724**

cfd
August 31, 2009